

Introduction

The Central Shenandoah Planning District was named for its geographic location in the heart of Virginia's famous Shenandoah Valley. The district comprises Augusta, Bath, Highland, Rockbridge and Rockingham counties; the cities of Buena Vista, Harrisonburg, Lexington, Staunton and Waynesboro; and the towns of Bridgewater, Broadway, Craigsville, Dayton, Elkton, Glasgow, Goshen, Grottoes, Monterey, Mount Crawford and Timberville.

Region 6 has a total area of approximately 3,437 square miles. The Blue Ridge Mountains form the eastern boundary and the Allegheny range lies along the western part of the region. Nestled between these mountains, Virginia's Shenandoah Valley contains beautiful and diverse landscapes of fertile farmland, rolling fields and forests. The North Fork and South Fork of the Shenandoah River flow through the valley, and create opportunities for fishing, swimming, canoeing and camping. Many of the headwater streams that form the Shenandoah River originate in Augusta and Highland counties. Streams in Augusta, Highland and Bath counties form the headwater sections of the James River system, with the river itself cutting through the southern corner of Rockbridge County.

Agriculture, forestry and tourism are the primary industries for Region 6. Some of the highest proceeds in the state from agriculture and forestry are received in this region. The George Washington and Jefferson (GW-Jeff) National Forests to the west and Shenandoah National Park and the Blue Ridge Parkway to the east frame the region and provide additional opportunities for economic development. Shenandoah National Park generates more than \$44 million in revenue for central and northern Shenandoah Regions annually. In 2006, the Blue Ridge Parkway had its first attendance increase in five years. This increase contributes greatly towards revenues from tourist dollars.

According to the 2000 Census, more than 258,750 people live in this region. This represents an approximate 15 percent increase from the 1990 census numbers. The population projections for 2010 project growth since 2000 up to about 6.8 percent. This region is filled with contrasts of significant population growth in some counties to population loss in others. The population of the region is estimated to grow from

276,798 in 2010 to 292,595 in 2020, approximately at a 5.7 percent growth rate.

With the increase in population, mega-agriculture and industry, the landscape and demographic composition of region 6 is changing. While the region has below the state average of minorities, the Hispanic population has grown significantly in Harrisonburg and is approaching the state average in Rockingham County and Waynesboro. Recreational planners need to address growing cultural diversity and its influences on the resources and programs in the region.

Recommendations applicable to all regions are found in chapters III through IX. To meet needs established in the 2007 *Virginia Outdoors Plan (VOP)*, it is important to integrate these recommendations with those that follow for Region 6 into regional and local planning and development strategies.

Outdoor recreation

For a general discussion of outdoor recreation trends, issues and planning considerations in Virginia, see Chapter II: Outdoor Recreation Issues, Trends and Survey Findings, and Chapter VII: Outdoor Recreation Planning and Related Issues.

Based on the findings of the 2006 *Virginia Outdoors Survey (VOS)*, the top 10 most popular outdoor activities in the mountain region of the state, which includes Region 6, are walking for pleasure, driving for pleasure, swimming (all types), visiting historic sites, visiting natural areas, fishing, sunbathing, camping, picnicking, and using a playground, respectively. Bicycling is included in the top ten activities for the region, while it is ranked 13th statewide. Though the demand for hunting has dropped dramatically across the state, in Region 6 participation has increased. Most public hunting lands in Virginia lie west of the Blue Ridge, and the surplus of hunting acres in this region attracts hunters from other regions.

The results of the 2006 Demand, Supply and Needs Analysis for Region 6 indicate a surplus of park and open space lands, developed campsites and hiking-backpacking trails. This abundance is due mainly to vast natural resources and outdoor recreational facilities on state and federal lands. Many of the activities

showing a surplus of facilities in the region are actually at capacity due to visitors and tourists from outside the region that increase recreational demands. Walking and jogging trails are needed throughout this region in locations close to home. Access to recreational waters is in demand in Region 6. Tent camping facilities is the third highest shortfall in facilities (see Table X-6).

Many of these facilities will be provided by Region 6 localities. Urbanized areas within the region have a better supply of recreational facilities, both in terms of quality and quantity. According to the Commonwealth of Virginia Auditor of Public Accounts, *Comparative Report on Local Government Revenues and Expenditures* (year ended June 30, 2005), per capita spending on parks and recreation for each locality in this region was: Augusta County, \$16.78; Bath County, \$86.19; Highland County, \$13.27; Rockbridge County, \$28.31; Rockingham County, \$18.55; Lexington, \$52.91; Staunton, \$154.45; Waynesboro, \$72.84; Buena Vista, \$193.69; and Harrisonburg, \$89.21. The budgetary and actual expenditures for the region indicate that the average spending for recreation is \$72.62 per capita. The counties' average expenditure is \$36.00 per capita, which is well below the statewide county average of \$43.75. However, two jurisdictions with the highest per capita statewide spending include Buena Vista and Staunton, which distorts the overall average for Region 6. With average expenditures statewide in cities at \$76.45 per capita, Region 6 cities spend above the statewide average at \$118.47 per capita.

Land conservation

A detailed discussion on statewide awareness of the need for conservation of farmland, parks, natural areas, and historical and cultural resources is found in Chapter III: Land Conservation.

Large blocks of public lands provide much of the open space in Region 6. Federal land holdings include the Shenandoah National Park, GW-Jeff National Forests, the Appalachian National Scenic Trail (AT) with its land holdings and the Blue Ridge Parkway. Douthat State Park, natural area preserves, state wildlife management areas, state forests, and other state resources also provide open space in the region. With Rockingham and Augusta counties having large agriculture receipts, protection of working lands is key to preserving the viability of the agricultural economy of the region.

Land Trusts and Conservation Programs Operating in Region 6:

- APVA Preservation Virginia
- Appalachian Trail Conservancy
- Central Virginia Land Conservancy
- Chesapeake Bay Foundation
- Department of Historic Resources
- James River Association
- Potomac Conservancy
- Rockbridge Area Conservation Council
- Shenandoah Valley Battlefields Foundation
- The Conservation Fund
- The Nature Conservancy
- Valley Conservation Council
- Virginia Outdoors Foundation

Land conservation recommendations include:

- Localities that lie within the viewshed of the Blue Ridge Parkway, Skyline Drive and the AT should work to protect scenic views and adjacent lands. The National Park Service has viewshed management and landscape design guidelines for viewshed protection.
- Local and regional organizations should preserve and protect roadless areas, including the North River Roadless Area,
- Local and regional organizations should encourage development away from mountaintops to protect significant scenic views.
- Using conservation easements and other conservation instruments, local and regional organizations should continue to maintain and protect the more than 125,000 acres of rural and agrarian working landscapes and viewsheds, such as existing farmlands and forestal lands, including lands along the Dry River and the North Fork of the Shenandoah.
- The City of Harrisonburg needs to develop a plan for identifying and acquiring open space to meet citizen demands.

Green infrastructure

Information about green infrastructure is found in Chapter IV: Green Infrastructure. Regional recommendations for green infrastructure include:

- Local and regional agencies should become informed and educate constituents about green infrastructure planning, including guidance on local

zoning initiatives for changing community design and transportation systems.

- Local and regional organizations should support Rockingham County's Comprehensive Plan for designating greenways along 100-year flood plains.
- Local and regional organizations should continue investigation of using green infrastructure as a tool for managing stormwater issues.

Programs

The following recommendations integrate statewide program initiatives into responsive regional strategies for outdoor recreation and conservation. The statewide program areas addressed in this section include: trails and greenways, blueways and water access, historic and landscape resources, scenic resources, scenic highways and Virginia byways, scenic rivers, watersheds, environmental and land stewardship education, and the private sector. Recommendations are bulleted or numbered and are not sequenced by state or local priorities. Numbered recommendations are site specific to the regional map at the end of this section.

Trails and greenways

For more detailed information, see Chapter VII: Outdoor Recreation Programs and Initiatives, Greenways and Trails.

- Regional and local organizations should develop a system of equestrian trails in the region.
- Regional and local organizations should utilize old logging roads for mountain biking and equestrian trails.
- Regional and local organizations should encourage partnerships with private landowners for multi-use trails open to the public.
- Regional and local agencies should implement, adopt, review and update local and regional trail and greenway plans to ensure applicability and expand multi-use opportunities. Links should be included to Liberty Park, the Blacks Run Greenway, the *Waynesboro Greenway Plan*, the *Central Shenandoah Valley Greenways Plan* and a trail-greenway-blueway system along the Maury River that connects Glen Maury Park with downtown Buena Vista and existing riverwalk trails.
- Regional and local organizations should connect the region's Civil War battlefields with other protected public lands, including the GW-Jeff National Forests and the Shenandoah National Park, as well as with

existing and future state parks in the valley, by proposing a comprehensive walking and bicycling trail system. These linkages should include a greenway or trail connecting the Cross Keys and Port Republic battlefields in Rockingham County to the Piedmont Battlefield in Augusta County with Shenandoah National Park. Likewise, connect the McDowell Battlefield in Highland County to the Staunton to Parkersburg Turnpike, Camp Allegheny on the Monongahela National Forest, and Fort Johnston on Shenandoah Mountain in the GW-Jeff National Forests.

Statewide trunkline trails

- 1 The **AT** was designated by Congress and is managed by the National Park Service (NPS). The AT runs through the eastern portion of Region 6 along the Blue Ridge. The Appalachian Trail Conservancy (ATC) has member clubs that voluntarily work with federal, state and local governments, as well as numerous individual landowners, to solve problems associated with the acquisition, development, administration, management and maintenance of the AT. Regional and local efforts within Region 6 should continue to protect the setting and viewsheds along the AT to preserve the experience of a footpath in the wilderness.
- 2 Regional and local organizations should complete the development of the **Great Eastern Trail** through the Allegheny Mountains to link existing trails from central Alabama to central New York along the Allegheny Highlands. The proposed Allegheny Trail, a section of the Great Eastern Trail, traverses a portion of the region in Alleghany County. Portions of the trail have been constructed, and it is nearly complete in West Virginia. The trail will connect to the AT.
- 3 Regional and local organizations should develop the **James River Heritage Trail** in recognition of the 2007 commemoration of Jamestown and the James River. The trail along America's Founding River will ultimately stretch from the Chesapeake Bay to the foothills of the Appalachian Mountains. The trail would parallel the old Kanawha Canal towpath and connect park trails, scenic riverside roadways and urban riverfront trails deep into the heart of Virginia, including Glasgow Landing. Additional public water access sites along the James may be included along this trail.

Regional trails

- 4 Regional and local organizations should connect a regional network of trails from the City of Waynesboro and Augusta County to the **Crozet Tunnel** at Afton Mountain. Once completed, the tunnel will be the

longest bicycle-pedestrian tunnel providing safe off-road access across the Blue Ridge, and it will connect to the proposed Three-Notched trail that will link Charlottesville with Richmond.

5 Regional and local organizations should support development of the **Allegheny Highlands Horse Trail**, a 45-mile system of connecting trails in Allegheny and Bath counties of the GW-Jeff National Forests, to connect with trails in Douthat State Park.

6 Consideration should be given by local and regional organizations to the development of the **North River Trail**, a linear rails-to-trails park utilizing the abandoned Chesapeake and Western railway corridor along the North River and Mossy Creek, from North River Gorge to Bridgewater in Augusta and Rockingham counties. This greenway trail will connect the Shenandoah National Park to the GW-Jeff National Forests.

7 A **Staunton to Harrisonburg Rail-with-Trail** could be developed by regional and local organizations along the former Norfolk Southern railroad corridor now owned by the Shenandoah Valley Railroad, a short line operator. The lower traffic volumes may offer opportunities for various user groups to accept a shared corridor.

8 Regional and local organizations should implement the **Brushy Blue Greenway**, which links the Blue Ridge Parkway to Brushy Hill Preserve, to provide a connection to Boxerwood Nature Center and Garden. Consideration should be given to the development of a western connector to the GW-Jeff National Forests with accommodations for horses and bicycles. The Chessie Nature Trail is also a part of the Brushy Blue Greenway. Pedestrian bridges and continuous pedestrian passage should be re-established along this trail from the end of Woods Creek trail at Jordan's Point to Buena Vista.

9 The **Clifton Forge to Staunton to Waynesboro** (Charlottesville) segment of the CSX Railroad was proposed for abandonment several years ago. The line is still active and the corridor could now be considered for rail-with-trail usage, to be converted to a rail-trail should the line be abandoned.

10 Implement development of the **Jackson River Scenic Trail** as a greenway from Lake Moomaw to Hot Springs.

11 Regional and local organizations should develop trails connecting GW-Jeff National Forests through the **Lexington Reservoir site to the City of Lexington**.

12 Regional and local organizations should develop the **Staunton Frontier Trail system** linking the Frontier Culture Museum of Virginia to Betsy Bell and Gypsy Hill parks. This could also link other state facilities, including, but not limited to, Western State Hospital and Blue Ridge Community Center.

Water access and blueways

A discussion of the water access in the Commonwealth can be found in Chapter VII: Outdoor Programs and Initiatives, Water Access and Blueways. Local and regional recommendations include:

- Regional and local agencies should establish cooperative agreements among localities, other agencies and private landowners to meet the increasing need for public access to recreational waters.
 - Regional and local agencies should identify strategies to make additional waterfront resources available for public use.
 - Regional and local agencies should provide adequate support facilities and services, such as restrooms, concessions, parking and maintenance for existing and proposed public water and beach access areas.
 - Regional and local agencies should acquire or maintain access to existing public beaches and water access sites that may be jeopardized by changes in land use or development activities.
 - Regional and local organizations should provide additional public access on the larger headwater streams in Highland and Bath counties.
- 13** Consider a controlled water release from the Staunton Dam on the **North River** to attract white water enthusiasts, boost the local economy and provide local recreation.

14 Regional and local organizations should continue promotion and development of the **Upper South Fork Shenandoah River Blueway**.

15 Rockbridge County organizations should consider additional public water access opportunities on the **Maury River**.

16 Regional and local organizations should provide additional water access on the **South Fork of the Shenandoah River**.

17 Regional and local organizations should develop a **Jackson River** blueway from Route 220 in Highland County to Lake Moomaw.

18 Regional and local organizations should develop and implement a trail and blueway plan that would connect Broadway, Timberville and New Market along the **North Fork of the Shenandoah River**.

Historic and landscape resources

The Central Shenandoah Valley is a major tourist destination for visitors from throughout the country because of the region's many natural and historic resources. Nationally known resorts, such as historic Homestead, are popular destinations that offer year-round opportunities, such as snow skiing and championship golf courses. The Frontier Culture Museum of Virginia near Staunton has also become a popular attraction.

All the localities in this region have resources on the National Register of Historic Places, including a number of historic districts that date back to the first settlement in the area. The entire region is dotted with historic villages, farms and inns. Since the area has remained largely rural, most of these historic sites have retained a high degree of integrity.

Consideration should be given to evaluating potential historic and landscape recommendations in this region. For more detailed information, see Chapter VII: Outdoor Programs and Initiatives, Historic and Landscape Resources. Local and regional recommendations include:

- Regional and local agencies should identify historic and archaeological resources that can be used for tourism, recreation and education. These resources should be included in local land use planning and decision-making processes to promote preservation and protection.
- Regional and local agencies should build local historic attractions, historical societies, museums and other tourism organizations in the region to include the Virginia Association of Museums, Virginia Civil War Trails, APVA Preservation Virginia, the Virginia Main Street Program and others to enhance local heritage tourism, educational and recreational offerings.
- Regional and local agencies should encourage local governments and private organizations that own historic properties in the region to manage properties effectively for long-term protection and to maximize public benefit consistent with the nature of the historic property.
- Regional and local agencies should recognize the multiple historic and cultural resources within the rural landscape through rural historic districts.

- Regional and local agencies should support the creation of other heritage area programs to promote tourism and preservation in distinctive regions.
- Regional and local organizations should protect the historic integrity and visual and rural character of the important Civil War battlefields by implementing the *2000 Shenandoah Valley Battlefields National Historic District Management Plan*. The plan promotes the protection, preservation and continued appreciation of the historic, cultural and natural resources that are associated with the battlefields. This is important since it is one of the most "characteristically American" regions in the country. According to the management plan, about 70 percent of the core areas identified retain their original integrity, while only a portion of those areas are in some way protected. Focus should be put on the McDowell Battlefield in Highland County, the Piedmont Battlefield in Augusta County, and the Port Republic and Cross Keys battlefields in Rockingham County.
- Local government and local and regional organizations should work with the state to meet the critical need for county-wide surveys of historic and architectural resources in the City of Buena Vista.
- Local government and local and regional organizations should work with the state to meet the critical need for county-wide surveys of archaeological resources in Highland County.

19 Local government and local and regional organizations should develop a plan for promoting the **Staunton to Parkersburg Pike** as a valuable historic, cultural and economic asset for the region.

20 Establish a historic district in the **Middlebrook-Brownsburg Corridor**, which has been studied for connections to local historic districts and its landscape value.

Scenic resources

Consideration should be given to potential scenic recommendations in this region. For more detailed information, see Chapter VII: Outdoor Programs and Initiatives, Scenic Resources. Local and regional recommendations include:

- Regional and local agencies should develop corridor management plans for scenic byways, blueways, greenways and scenic rivers to assure preservation of the scenic quality of the corridor.
- Regional and local agencies should protect the scenic value of lands adjacent to publicly owned prop-

erties, as well as the scenic value of working agricultural and forestal areas key to maintaining a sense of place and economic vitality of the region. Scenic attributes to be considered include:

- Encourage development away from mountaintops to protect significant vistas.
- Consider timber harvesting impacts on key viewsheds.
- Protect viewsheds along river corridors and scenic byways.
- Create scenic overlooks and vista cuts along Virginia byways and scenic highways to enhance the visual experience of traveling.
- Local government and local and regional organizations should continue efforts to protect the natural and scenic resources of Skyline Drive, Blue Ridge Parkway, AT and the GW-Jeff National Forests. Local governments should support efforts to encourage adjacent landowners, localities and planning district commissions to develop a scenic overlay zone adjacent to and within the viewsheds as part of a multi-regional viewshed planning process. Federal and state agencies should coordinate with localities to help protect these resources.
- Local government and local and regional organizations should protect the scenic aspects of I-81, as the American Automobile Association and other groups recognize it as a scenic highway acting as an attractive gateway to the state.
- Local government and local and regional organizations should create a natural buffer between the AT and adjacent development.

21 High priorities have been set by the ATC to protect and conserve the **Humpback Rocks** area.

22 **Hightop Mountain** is a high priority for protection by the ATC.

Scenic highways and Virginia byways

Opportunities to traverse Virginia's scenic and cultural landscapes are enhanced through nationally recognized designation. For more detailed information, see Chapter VII: Outdoor Programs and Initiatives, Scenic Highways and Virginia Byways.

On Sept. 22, 2005, national byway designations were given to four Virginia roads. The Blue Ridge Parkway was given the highest designation as an All-American Road. The Skyline Drive received National Scenic Byway status. These designations allow localities

along the routes to access federal dollars for byway corridor projects (see Chapter VI). These major scenic highways attract tourists from throughout the nation, as well as international visitors. The character of the Blue Ridge Parkway, as well as some sections of Skyline Drive, has been altered from that of a pastoral scene, to landscapes that are sometimes marked by incompatible development. Overlooks that once featured breathtaking vistas of farmsteads or forest now reveal factories and exploding suburban residential development. In some cases, subdivisions are within a few hundred feet of these magnificent corridors, and as development continues, there will be additional impacts on the quality of the visitor experience.

Regional and local recommendations include:

- Development of a Virginia Karst Trail is recommended to help educate the public about karst resources in the Commonwealth. This thematic trail will promote resource management goals and best management practices that help landowners protect sensitive karst resources such as caves, springs and sinkholes. The trail will focus on above ground features and tourist caves throughout the state's valley and ridge physiographic province. The Virginia Karst Trail, endorsed by the Virginia Region of the National Speleological Society and the Virginia Cave Board, will benefit the state through increased educational, commercial and tourism opportunities.
- Regional and local agencies should recognize and nominate scenic roads for designation as Virginia byways.
- Regional and local agencies should partner with other state, local and professional organizations to develop corridor management plans to protect the scenic assets of byway corridors.
- Regional and local agencies should incorporate Virginia byways and scenic highways into local comprehensive plans and zoning ordinances to ensure viewsheds are conserved and the sense of place retained along these corridors.
- Regional and local agencies should support designation of nationally qualified historic corridors to increase civic engagement and foster heritage tourism.
- Communities along the national byways should consider strengthening local comprehensive plans and creating special zoning regulations to protect the unique scenic and economic benefits associated with the scenic values of the Blue Ridge Parkway and Skyline Drive and their viewsheds.

- Local agencies should develop comprehensive plans and zoning ordinances to ensure that the intrinsic value of the Blue Ridge remains intact.

23 Regional and local organizations should designate the historic **Valley Road**, Route 11, as a Virginia Scenic Byway. A corridor management plan should be developed, and a historic district for the protection of the scenic corridor should be created. A plan to make it eligible for National Scenic Byway designation needs to be developed. Improvements should be made for bicycle and pedestrian access along Route 11 to serve residents and visitors to the region.

24 Regional and local organizations should support plans for the development of the **Mountain Waters Byway** promoting scenic Route 39 from Lexington to the West Virginia Line.

The following road segments have been recommended for consideration as a Virginia Byway:

25 **Route 250** in Highland and Augusta counties from the West Virginia state line to Route 42 at Churchville.

26 **Route 220** in Highland and Bath counties. Create a designated bike route along Route 220 between Monterey and Warm Springs.

27 **Route 42** in Augusta and Rockbridge counties from Route 39 to Rockingham County near Harrisonburg (in Region 7). Consideration should also be given to the section from Rockingham County to Shenandoah County. Develop a horse-drawn buggy-bikeway along Rt. 42 from Dayton to Harrisonburg and add shoulders that can accommodate bikes.

28 **Route 84** in Highland County.

29 **Route 657** in Augusta County.

30 **Route 256** in Augusta County.

31 **Route 780** in Rockbridge County.

32 **Route 252**, from near Staunton to the intersection with Route 39 in Rockbridge County.

33 **Route 608** in Rockbridge and Augusta counties, from near Buena Vista to the intersection with Route 340 at Stuarts Draft.

34 **Route 60** in Rockbridge County between Buena Vista and the Blue Ridge Parkway.

35 **Route 251** from Lexington to Collierstown.

Scenic rivers

For detailed information about the Virginia's Scenic Rivers Program and its purpose, benefits and designation process, see Chapter VII: Outdoor Recreation Programs and Initiative, Scenic Rivers. In Region 6, the St. Marys River is the only designated scenic river. Regional and local recommendations include:

- Localities should adopt planning tools (e.g., land use overlays, corridor management plans) that will afford special recognition and protection to Virginia's scenic rivers.
- Segments of the Bullpasture, Cowpasture, Jackson, North and St. Marys rivers, as well as Back Creek, have been identified in the Forest Service's *Revised Land and Resource Management Plan* as eligible for consideration for potential federal Wild and Scenic River designation. The Virginia Department of Conservation and Recreation and the Forest Service will work together to determine suitability for inclusion in the program.

The following river segments are potential Virginia Scenic Rivers and should be evaluated to determine suitability for designation:

36 The **Calfpasture River** from Marble Valley to the Maury River.

37 The **Jackson River** from its headwaters to Lake Moomaw.

38 The **James River** from Springwood to Glasgow in Rockbridge County.

39 **Back Creek** from Sunrise to Blowing Springs.

40 The **Cowpasture River** from Patma to Route 39.

41 The **Calfpasture River** from Route 250 to Marble Valley.

42 The **north and south forks of the Shenandoah River** in Rockingham County.

43 **Laurel Fork** within Highland County.

44 The entire **Maury River**. The Maury River from Limekiln to Lexington has been studied and was found to qualify for designation.

Watershed resources

For information about Virginia's watershed programs, see Chapter VII: Outdoor Programs and Initiatives, Virginia's Watershed Programs.

Region 6 is split between the James River and Potomac watersheds, which both ultimately flow into the Chesapeake Bay. Currently, the Chesapeake Bay Act does not cover Region 6; therefore, there are no Bay related development controls. Karst topography, which covers much of the region, creates special issues and considerations for water quality and quantity in the region. A regional policy committee is developing comprehensive policies for management of these water resources.

Watershed groups in Region 6

- Alliance for the Chesapeake Bay
- Chesapeake Bay Foundation
- Friends of the Shenandoah River
- Friends of the North Fork of the Shenandoah River
- James River Association
- Moores Creek Watershed Committee of Rockbridge Area Conservation Council (RACC)
- Pure Water Forum
- Rockbridge Area Conservation Council
- Shenandoah Pure Water Forum
- Shenandoah Basin Water Resources Supply Commission
- Waynesboro Riverfest
- Valley Conservation Council
- Virginia Conservation Network

Watershed recommendations for this region include:

- 45 Efforts should be made by regional and local agencies to maintain the open space within the **Moores Creek Watershed** for public recreation and sustained water quality, especially the 2,500 acres proposed for sale by the City of Lexington.

Environmental and land stewardship education

For detailed information on Environmental and Land Stewardship education, see Chapter VII: Outdoor Programs and Initiatives, Environmental and Land Stewardship Education. Environmental and land stewardship recommendations for this region include:

- 46 The uses of **James Madison University farm** should be expanded as an environmental education center for more research and public outreach.
- 47 Regional and local organizations should support the continued development of **Boxerwood Nature Center and Woodland Gardens** as an environmental

education facility. This resource could promote environmental stewardship, meaningful watershed education experiences and other outdoor education opportunities. An educational nature trail should be developed for ages ranging from preschool to adult. The implementation of the master plan of the Boxerwood Education Association, Inc. should be supported. This would include the purchase and protection of various land parcels that incorporate five natural habitats and an impressively mature woodland garden within the original Boxerwood Gardens.

Federal programs

For information on federal programs affecting Virginia's outdoor recreation and conservation opportunities, see Chapter IX-A: Resource Agencies. Local and regional recommendations are listed by agency.

National parks

- Local and regional government, user groups and nonprofits should work with NPS to revise policy that allows mountain bikes to use appropriate national park trails.
- The National Park Service should explore opportunities to provide additional bike trails within the national parks.
- The resource management plan for Shenandoah National Park should be implemented by NPS to deal with user conflicts and threats to the park's environment. Outbreaks of diseases or infestation by insects, along with poor air quality have jeopardized the quality of the experience and the health of the forestlands. Additional pressures exist along the perimeter of the park due to land use conflicts at the park boundaries.
- 48 The NPS should explore the use of the historic road through **Brown's Gap** in the Shenandoah National Park as a bicycle-pedestrian trail to link the Shenandoah Valley with the Rivanna River Valley.
- 49 The NPS should develop a **Blue Ridge visitor information and services center** in the vicinity of Interstate 64 near the intersection with Skyline Drive and the Blue Ridge Parkway to serve the millions of Shenandoah National Park and parkway visitors. A partnership among the National Park Service, the U.S. Forest Service (USFS), the Commonwealth of Virginia and surrounding localities could be created. This partnership would plan, build and operate a complex near Rockfish Gap or Afton Mountain that would complement the visitor center envisioned in the Shenandoah Battlefield National Historic District. The Blue Ridge

Parkway and adjacent localities should continue to collaborate on enhancing heritage tourism and guiding community gateway development and growth.

National forests

- New partnerships should be developed to market recreational opportunities and rural economic development through tourism. The USFS should work with DCR, Shenandoah Valley Travel Association and the Virginia Tourism Corporation to develop regional and international marketing strategies to showcase Virginia's outdoor recreation opportunities.
- USFS should develop a trail plan for the GW-Jeff National Forests that addresses the needs of all trail users through additional loop trails, and improved maintenance and management, while including all potential user groups in the planning process.
- The GW-Jeff National Forests goals and objectives state that the forest will operate using a balanced approach for resource based programs, recreation and conservation. There will be additional facilities provided during the life of the plan, including trails, camping, water access, natural resource interpretation and environmental education. Implementation of these recommendations could provide new and improved recreational opportunities for visitors. Regional and local organizations should support the aspects of the *Land and Resources Management Plan*, and call for additional facilities within the national forest, including trails, camping, water access, natural resource interpretation and environmental education.
- There is a demand for major trail improvements on the multi-user trail system in the North River Ranger District of the GW-Jeff National Forests. This 200-mile plus system of trails is a mix of purpose built trails, service roads, fire breaks and trails created by users. As trail use has increased, the unsustainable nature of existing trail alignments has resulted in erosion and tread damage. These trail conditions and a lack of loop opportunities are discouraging new users, degrading the recreation experience and causing resource damage.

50 USFS should enhance public access via the management plan to the **Rough Mountain Wilderness Area**.

51 **Lake Moomaw** and the surrounding lands are administered under a cooperative arrangement between the USFS, the U.S. Army Corps of Engineers and the Virginia Department of Game and Inland Fisheries (DGIF). Because of the lake's enormous

popularity and the variety of available recreational facilities, some areas are overcrowded. Additional developments are being considered and should be provided, including a visitor center, expanded campground, a new group camp and additional trails. A plan for a multi-use trail around Lake Moomaw should also be developed.

State facilities and programs

For a discussion of state facilities and programs throughout the entire Commonwealth, see Chapter IX-B: Resource Agencies. Local and regional recommendations are listed by agency or program.

State parks

52 **Douthat State Park** (4,552 acres) is located in Bath and Alleghany counties and bordered by national forest lands. Listed on the National Register of Historic Places, Douthat is one of the original six Virginia state parks opened in June 1936. The park offers picnicking and three shelters, three campgrounds, a group camp, cabins, two family lodges, restaurant, camp store, and more than 40 miles of hiking and biking trails. The 50-acre lake supports swimming, fishing and non-motorized boating. The lake and Wilson Creek are stocked seasonally with trout in cooperation with DGIF. Nature and cultural programs are offered each day through the summer season and on weekends in the spring and fall. Educational programs are offered at the park during the school year and are available to local youth and civic groups. Staff members also take outreach programs to schools in the surrounding six-county area. The Douthat State Park Environmental Education Group has been working with the park to generate funds for an environmental education center collocated with the visitor center.

Through the 2002 General Obligation Bonds, funds were allocated for the acquisition of additional land, the construction of an equestrian campground and additional cabins. The park is an integral component of the Allegheny Highlands Horse Trail. Additional opportunities exist for cooperative trail projects between the park and national forest.

53 The acquisition of **Grand Caverns** Regional Park located in Augusta County should be finalized. Additional acreage will be needed to meet the recommended size for a state park. An approved master plan will be required to develop the park. Adequate funding will also be needed to staff, operate and maintain the facilities to state park standards, as well as implement the use of Grand Caverns as a resource

for local schools on issues of water quality, habitat studies and karst education.

The need exists for additional park land in this region of the state. Potential acquisitions should be explored in western Rockingham County or north central Highland County.

State natural area preserves

Natural area preserves within this planning district are Cowbane Prairie, Mount Joy Pond and Folly Mills Fen in Augusta County, Goshen Pass in Rockbridge County, and Deep Run Ponds in Rockingham County. DCR has, as of November 2006, documented 1,128 occurrences of 342 rare species and natural communities in the Central Shenandoah Planning District. One hundred and five of these species are globally rare and twelve are federally threatened or endangered. One hundred eighty-four conservation sites have been identified in the district; 130 (71 percent) have received some level of protection through ownership or management by state, federal and non-government organizations. However, only 42 sites are protected well enough to ensure the long-term viability of the rare species and natural communities they support.

DCR recommends that all unprotected conservation sites, and all unprotected portions of partially protected sites, be targeted for future land conservation efforts. The appropriate method of protection will vary with each site, but may include placing the site on Virginia's Registry of Natural Areas, developing a voluntary management agreement with the landowner, securing a conservation easement through a local land trust, acquiring the site through a locality or local land trust, dedicating the site as a natural area preserve with the current owner, or acquiring the site as a state-owned natural area preserve.

Within Region 6, DCR is particularly interested in protecting:

- Protection of significant caves and karst areas.
- Protection of Shenandoah Valley sinkhole pond communities and other biologically significant wetlands, including habitat for Virginia sneezeweed.
- Protection of additional lands around the existing natural area preserves within the planning district.

State fish and wildlife management areas (WMA)

- DGIF should continue to investigate opportunities at **Gathright WMA, Highland WMA and Goshen-Little North Mountain WMA** to acquire in-holdings and to

improve the area with trails and other structures for wildlife viewing and other outdoor recreation.

- DGIF should continue to work with local and regional governments to support the Birding and Wildlife Trail program.

State forests

- Local and regional agencies should encourage the use of Department of Forestry (DOF) Best Management Practices in floodplain forest areas, particularly those adjacent to state-designated scenic waterways.
- Local and regional agencies should use DOF properties as field classrooms to help with educational programs.
- Local and regional agencies should coordinate with DOF and seek the assistance of local trail and river user organizations to develop forest trails and publish maps for each state forest, as well as establish greenways and blueways for public use.
- Local and regional agencies should investigate opportunities to acquire fee simple ownership or easements to conserve working farms and forests in the region.
- Local and regional agencies should work with DOF to create defensible space around buildings to reduce the risk of wild fires through the DOF Fire Wise Program.
- Localities should work with DOF on education and monitoring of tree diseases and other pests that could weaken forested environments.
- Agricultural lands should be targeted for reforestation to protect the water quality of the area and limit the effects of erosion.

54 Localities should work with the Virginia Department of Forestry (DOF) to provide bike trails to connect **Paul State Forest** to other community facilities. DOF will continue to develop environmental education programs using Paul State Forest as a research site, including the promotion and development of the birding trail.

Transportation programs

- Local and regional agencies should develop alternatives to the use of private automobiles for daily activities. Transit systems, bicycle and pedestrian accommodations, improved community design, as well as a change in people's attitudes toward transportation alternatives will be needed for the

transportation system of the future to meet capacity needs and energy constraints.

- Local and regional agencies should work with the Virginia Department of Transportation (VDOT) to implement Context Sensitive Solutions that accommodate multiple transportation modes.
 - Local and regional agencies should recognize the need for a network of low-speed, low-volume roadways used by equestrians, pedestrians and cyclists, and they should include protections for this network in their comprehensive plan.
 - Local and regional agencies should encourage the development of a permanent process for integrating the recommendations of local public health agencies, and they should include “active living” opportunities into all phases of transportation planning, land use planning and project design.
 - Local and regional agencies should implement the *Central Shenandoah Valley Bicycle Plan* and incorporate recommendations in local plans.
 - Local and regional organizations should implement the *Staunton Frontier Trail Plan: Creating Connections*.
 - Local and regional agencies should continue development, adoption and implementation of the bicycle plan for the City of Harrisonburg, Staunton, Rockingham County and other localities.
- 55 Local and state agencies should refine and clearly sign the location of the **Trans-American Bike Trail** (U.S. Bike Route 76). The corridor should be protected.

Other state lands

For a discussion of other state lands, see Chapter IX-C: Resource Agencies.

The following state-owned lands contain significant undeveloped open space that may have some potential for local recreational use. Each site should be assessed and, where appropriate, a cooperative agreement should be developed to make these resources available for local use as parks and open space.

- 56 The Virginia Military Institute and local and regional organizations should assess the potential to extend trails to and within the 60 acres of undeveloped open space known as **Lackey Farm** behind Rockbridge High School for greenways or recreational purposes.
- 57 **Western State Hospital** in Augusta County contains nearly 400 acres. Because the site appears to

be less than 50 percent developed, the potential exists for some type of joint use agreement. The hospital staff began development of an internal trail system in 1994. These facilities may offer some additional opportunities for use by the surrounding community.

58 The opportunity exists to develop or expand outdoor recreation opportunities at **Woodrow Wilson Rehabilitation Center** in Augusta County. Greater use of this resource could benefit the center and area residents.

59 The opportunity exists for expanded recreational facilities at **Blue Ridge Community College**.

60 Protection of the night skies from light pollution in the area of **Stokesville Observatory** is important to maintain the research and community educational opportunities this facility offers.

61 Harrisonburg should continue to work with **James Madison University** to enhance recreational opportunities for students and the community within and outside of the campus.

Local and regional parks and recreation departments

For a discussion of local and regional parks and recreation departments, see Chapter IX-D: Resource Agencies. Local and regional recommendations include:

- Explore reclamation of abandoned landfills into new and needed parks.
- Consider cooperative management for the recreational use of private, corporate, state or federally owned lands in order to increase local access and meet outdoor recreation needs.
- Local and regional organizations should continue development, adoption and implementation of Rockbridge County and Augusta County recreational plans, which incorporate local greenway and park plans. Community recreation facilities, pocket parks and trail connections should be developed, including Berry Farm property in Augusta County.
- Local and regional organizations should support and develop Sunset Park in Waynesboro.
- The City of Harrisonburg needs to develop a plan for identifying and acquiring open space to meet recreational demands of its citizens.

62 Local and regional agencies should expand facilities at **Highland Park** to meet the demand of outdoor recreation participants, including a recreational center, pool and trails.

Private sector

Much of the demand for outdoor recreation is met by the private sector. Because of the abundance of water resources in the region, there are a number of water-based recreational opportunities that could be explored. For a discussion of private sector role, see Chapter IX-E: Resource Agencies.

The private sector has numerous opportunities to become involved in recreation and tourism economic activities that result from the region's unique natural, cultural and historic resources. Demands for eco-

tourism in Region 6 are steadily increasing. This is causing an increased demand for facilities to house, feed and provide services for the millions of visitors to this region.

- Many of the significant battlefields from the Civil War remain in private ownership. The Shenandoah Valley Battlefield Foundation will rely heavily on public-private partnerships to implement the many recommendations found in the management plan for protecting these historic areas and helping to meet the needs of Civil War enthusiasts.
- Private companies provide canoes and other recreational watercraft to visitors seeking to explore the legendary South Fork of the Shenandoah, the James and Maury Rivers. Additional opportunities may exist to provide access points and visitor accommodations along these river corridors.



The Crozet Tunnel. Photo by Suzanne Gandy.

Table X-6. Region 6 (Central Shenandoah Planning District) Existing and Projected Outdoor Recreation Needs

Activity	Activity Days	Demand	Units	Supply	2010 Needs	2020 Needs
Baseball	351,573	69	fields	66	3	10
Basketball	431,476	102	goals	51	51	61
Bicycling	379,539	27	miles	NI		
Mountain	62,591	4	miles	NI		
Other	316,948	23	miles	NI		
Lake, river and bay use (combined)	316,948	5,680	water acres	4,038	1,642	2,202
Power boating	150,217	3,621	water acres	S		
Sailing	21,307	184	water acres	S		
Salt water fishing	75,109	422	water acres	S		
Jet ski, personal watercraft	47,942	751	water acres	S		
Water skiing, towed on water	22,373	701	water acres	S		
Camping	430,943	2,541	sites	2,286	255	506
Tent camping	246,367	1,453	sites	556	897	1,040
Developed camping	184,576	1,089	sites	1,730	-641	-534
Fitness trail use	221,065	18	mile trails	7	11	12
Fields (combined)	452,783	95	fields	47	48	58
Football	170,460	36	fields	47	-11	-8
Soccer	282,324	59	fields	-	59	65
Stream use (combined)	998,520	635	stream miles	467	168	230
Freshwater fishing	868,278	611	stream miles	S		
Human-powered boating	46,876	12	stream miles	S		
Rafting	26,634	5	stream miles	S		
Tubing	56,731	7	stream miles	S		
Golfing	336,658	11	courses	229	-1	0
Hiking, backpacking	419,490	215	trail miles	790	-575	-554
Horseback riding	119,854	52	miles	329	-277	-272
In-line skating	71,913	5	miles	NI		
Jogging, running	1,731,230	139	mile trails	NI		
Nature study, programs	73,244	10	sites	1	9	10

Note: Demand multipliers used to create this chart are based on the Virginia Department of Conservation and Recreation's 2006 *Virginia Outdoors Survey* as measured at the regional level. Additional analysis is required to adjust these results for local conditions.

NA: not applicable, no standard needed

S: same as combined

NS: not inventoried separately

NI: not inventoried

(-) indicates surplus

Table X-6. Region 6 (Central Shenandoah Planning District) Existing and Projected Outdoor Recreation Needs – continued

Activity	Activity Days	Demand	Units	Supply	2010 Needs	2020 Needs
Picnicking away from home	363,558	944	tables	2,843	-1,899	-1,806
Skateboarding	202,421	62	sites	NI		
Snow skiing or snowboarding	45,545	1	ski lifts	4	-3	-3
Softball	378,207	67	fields	49	18	25
Sunbathing, relaxing on beach	493,800	35	beach acres	31	4	8
Swimming	2,663,430	179		NI		
Outdoor area	1,337,042	137	beach acres	31	106	119
Outdoor pools	870,942	37	pools	26	11	14
Indoor pools	455,447	5	pools	6	-1	0
Tennis	207,748	130	courts	109	21	34
Used a playground	716,463	102	sites	75	27	37
Visiting gardens	70,847	8	sites	NI		
Visiting historic sites	390,725	33	sites	NI		
Visiting natural areas	497,529	84	sites	NI		
Volleyball	125,181	37	courts	4	33	37
Hunting	854,961	140,204	acres	513,551	-373,347	-359,525
Drive for pleasure	1,765,854	NA	NA	NI		
Driving motorcycle off road	71,913	33	miles	19	14	17
Driving 4-wheel-drive off road	300,968	NA	NA	NS		
Walking for pleasure	5,729,038	NA	NA	NI		
Bird watching	70,315	NA		NI		
Other	154,479	NA	NA	NI		

Note: Demand multipliers used to create this chart are based on the Virginia Department of Conservation and Recreation's 2006 *Virginia Outdoors Survey* as measured at the regional level. Additional analysis is required to adjust these results for local conditions.

NA: not applicable, no standard needed

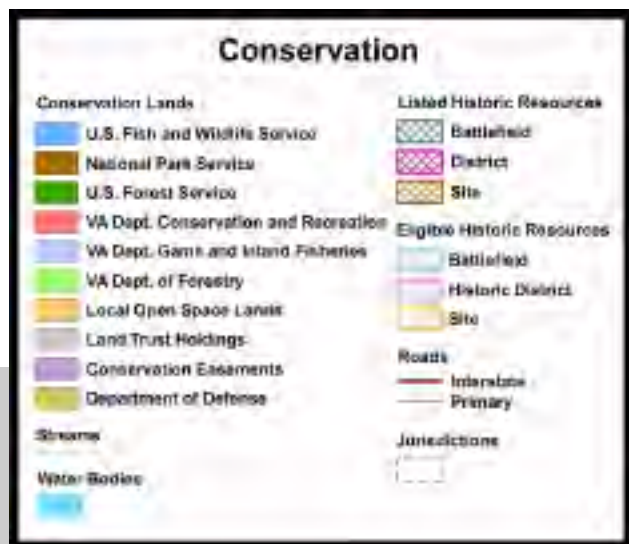
S: same as combined

NS: not inventoried separately

NI: not inventoried

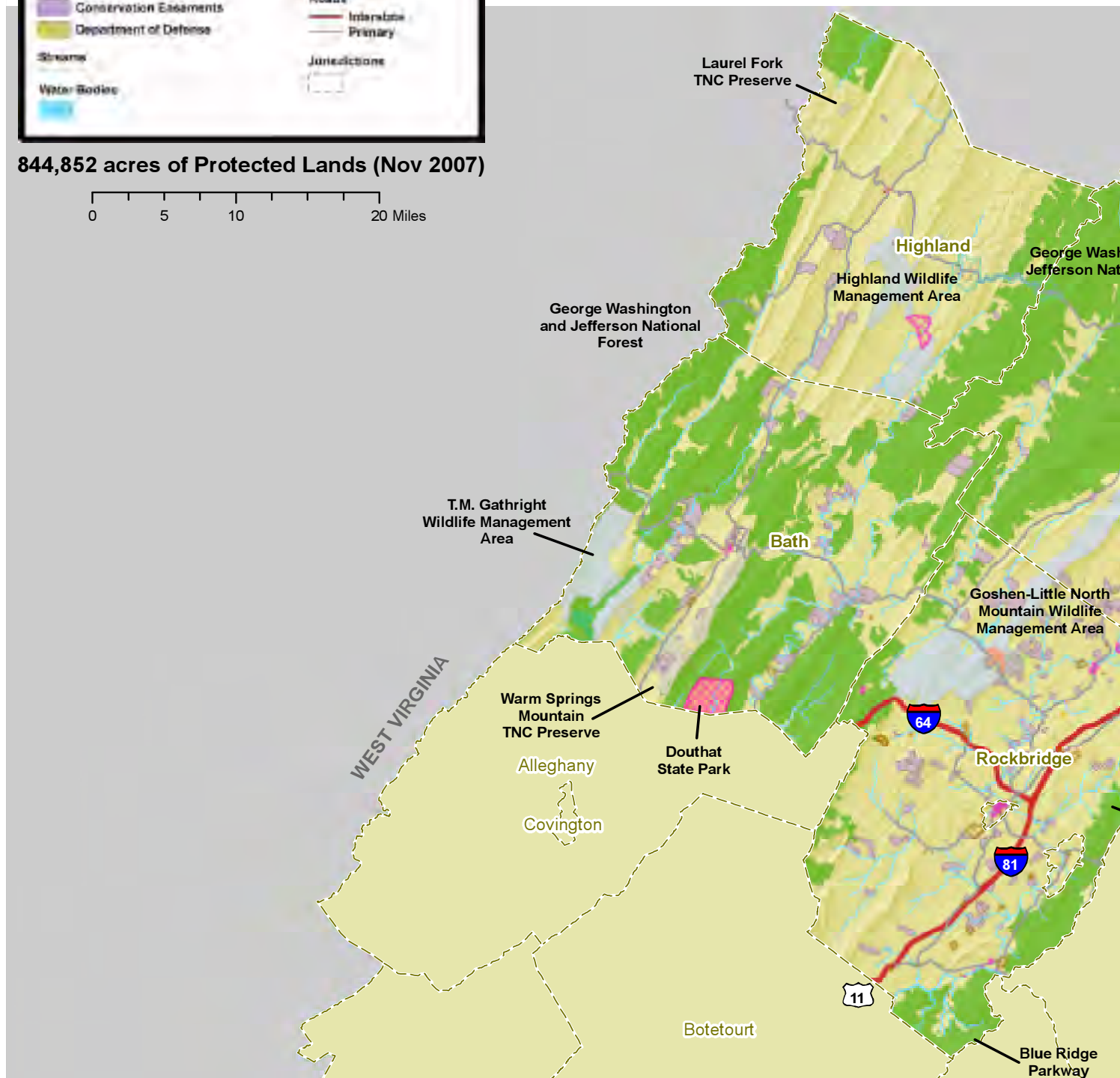
(-) indicates surplus

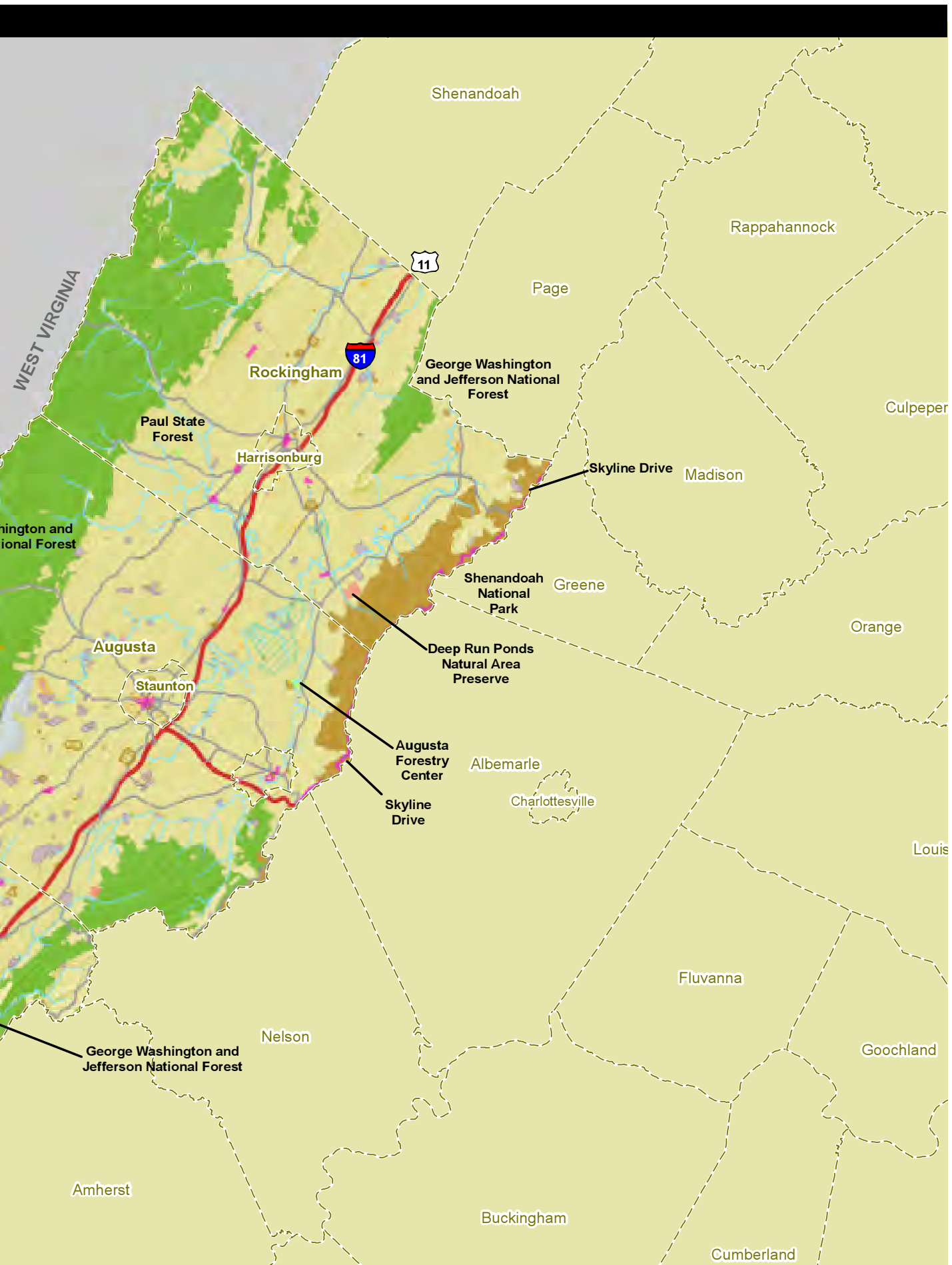
Map X-12. Region 6 (Central Shenandoah Planning District) Conservation Lands



844,852 acres of Protected Lands (Nov 2007)

0 5 10 20 Miles





Map X-13. Region 6 (Central Shenandoah Planning District) Outdoor Recreation

